# FINDING OF NO SIGNIFICANT IMPACT FOR BIG SKY WATER AND SEWER DISTRICT 363 WATER SYSTEM IMPROVEMENTS

#### TO: ALL INTERESTED PERSONS

Date: August 5, 2008

Action: Funding Water Main Replacements

Location of Project: Big Sky, Montana

DEQ Funding: \$630,973. Total Project Cost: \$630,973.

An environmental review has been conducted by the Montana Department of Environmental Quality (DEQ) for proposed funding for improvements to the Big Sky County Water and Sewer District No. 363 water system. The proposed project involves water main replacements in the Silver Bow Condominiums area. The purpose of the project is to make improvements to the water system that are needed to protect public health and the integrity of the drinking water infrastructure.

The affected environment will primarily be the Silver Bow Condominiums area in Big Sky and the immediate vicinity. The human environment affected will include residents and visitors of Big Sky. Based on the environmental assessment, the project is not expected to have any significant adverse impacts upon terrestrial and aquatic life or habitat, including endangered species, water quality or quantity, air quality, geological features, cultural or historical features, or social quality.

This project will be funded with low interest loans through the Montana Drinking Water State Revolving Fund Program, administered by the Montana Department of Environmental Quality and the Montana Department of Natural Resources and Conservation.

The DEQ utilized the following references in completing its environmental review of this project: a Uniform Environmental Checklist for Montana Public Facility Projects completed by HKM Engineering dated June 21, 2008, a Water Facility Plan dated March 2002 by Allied Engineering Services, a Design Report for 2008 Silverbow Water Line Replacement Project by HKM Engineering, June 2008, Plans and Specifications 2008 Silverbow Water Line Replacement Project by HKM Engineering dated June 2008, Montana Natural Heritage Program, species of concern and ecological report dated June 26, 2008, a letter from Montana Historical Society (MHS) dated June 25, 2008, a letter from USFWS dated July 7, 2008, Big Sky Water & Sewer District No. 363 Public Hearing and Regular Meeting Minutes – May 13, 2008, General Manager's Report, Big Sky Water & Sewer District No. 363, Regular Meeting Minutes – June 17, 2008, Big Sky Water & Sewer District No.

363 Regular Meeting Minutes – July 15, 2008, and an environmental checklist and environmental assessment completed by the DEQ. In addition to these references, letters were sent to Montana Department of Fish, Wildlife & Parks (FWP), United States Fish and Wildlife Service (USFWS), the Montana Department of Natural Resources & Conservation (DNRC), United States Army Corps of Engineers (USACE), the Montana State Historic Preservation Office (SHPO) and the Department of Environmental Quality. Responses have been received from SHPO and USFWS. These references are available for review upon request by contacting:

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Or:

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Big Sky County Water & Sewer District N0. 363
P.O. Box 160670
561 Little Coyote Road
Big Sky, MT 59716
Phone (406) 995-2660

Comments on this finding or on the EA may be submitted to DEQ at the above address. Comments must be postmarked no later than 30 days after the date of publication of this FONSI in the newspaper. After evaluating substantive comments received, DEQ will revise the EA or determine if an EIS is necessary. Otherwise, this finding of no significant impact will stand if no substantive comments are received during the comment period or if substantive comments are received and evaluated and the environmental impacts are still determined to be non-significant.

Signed,

Todd Teegarden, Chief Technical & Financial Assistance Bureau

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## ENVIRONMENTAL ASSESSMENT FOR BIG SKY Water and Sewer District #363 SILVER BOW CONDOMINIUMS WATER MAIN REPLACEMENT

#### I. COVER SHEET

Project Identification: Silverbow Condominiums Water Main Replacement 561 Little Coyote Road Big Sky, MT 59716

Contact Person:
Ron Edwards
Big Sky Water and Sewer District 363
561 Little Coyote Road
Big Sky, MT 59716

Telephone Number: (406) 995-2660

#### Abstract:

The Montana Department of Environmental Quality (MDEQ) proposes to provide funding for improvements to the Big Sky Water and Sewer District 363 water system. The proposed action involves water main pipe replacements within the Silver Bow Condominiums portion of the water system. These improvements will be located in Gallatin County Montana in Township 6 South, Range 3 East, Section 36, more specifically in the Meadow Village Complex along Black Otter Road in Big Sky. (See Maps Appendix A).

#### A. Comment Period:

Public Comments will be accepted regarding this environmental assessment if postmarked no later than 30 days after publication in the newspaper of the Finding of No Significant Impact.

#### II. PURPOSE OF AND NEED FOR PROPOSEDACTION

The Department of Environmental Quality proposes to fund the proposed action to assist the Big Sky Water and Sewer District to replace aging and undersized water mains in the Silverbow Condominiums part of the water system. This part of the system has experienced leaking distribution main and service lines. Leaking, undersized and deteriorated lines lead to unnecessary water loss and can result in a pathway for contamination to enter the system. Therefore, replacing these mains is a necessary step to ensure water system integrity and to improve public health protection.

#### III. ALTERNATIVES INCLUDING THE PROPOSED ACTION

#### A. Discussion of Alternatives

The department approved a Water Facility Plan for the Meadow Village portion of the Big Sky Water and Sewer system in 2002. Alternatives evaluated in the 2002 Water Facility Plan included rehabilitating existing wells, developing new wells, distribution system improvements for both Hidden Village and Meadow Village and several options for storage in the Hidden Village/Meadow Village system. Some of the alternatives were constructed previously and were covered in separate analyses. Those alternatives included the construction of a storage reservoir above West Fork Meadows near Hidden Village and the distribution system work necessary to interconnect Mountain Village, Hidden Village, West Fork Meadows and Meadow Village. The only alternative for the proposed action is the do-nothing or no-action alternative which is rejected because it will not solve the problem of leaking pipelines. The proposed action is estimated to cost \$630,973.

#### IV. AFFECTED ENVIRONMENT

## A. Description of the Project Planning Area:

1. The planning area is located in Gallatin County, Montana south of the Spanish Peaks Wilderness area and northwest of Yellowstone National Park (Maps, Exhibit A). It is part of the Greater Yellowstone Ecosystem. The water system utilizes groundwater from 3 wells located in the Meadow Village and 5 wells located in the Mountain Village. There are 3 storage reservoirs in Meadow Village with a total storage volume of 1.75 million gallons and 1 storage reservoir with a total storage volume of 1.5 million gallons in Mountain Village. The system is studying the use of chlorine as a disinfectant, but currently does not apply any treatment to the drinking water. The Silver Bow Condominium pipeline project includes installation of 8-inch, 6-inch, 4-inch and 3-inch ductile iron pipe (DIP) water lines and replacement of copper and steel service lines with polypropylene pipe and fire hydrants. The following table shows the quantities of pipe and fire hydrants:

Item	8" DIP	6" DIP	4" DIP	3" DIP	1"-2"	3/4"	Fire
	(ft.)	(ft.)	(ft.)	(ft.)	service	service	Hydrants
Base Bid	1560	75	100	50	575	130	5
Alt 1	305	147	413	50	261	0	1
Alt 2	0	0	487	0	30	170	2
Alt 3	0	0	467	0	35	410	3

2. These pipes will be installed in the existing rights-of-way under existing road surfaces in the developed area of Silverbow condominiums. Silverbow condominiums represent approximately 70 single family equivalents. An SFE is equivalent to a single family dwelling. This area uses approximately 7,000 gallons per day (gpd) of water on an average day and approximately 21,000 gpd on a maximum day.

- 3. Big Sky is a destination ski resort and summer resort. It is located in a broad intermountain valley surrounded by excellent habitat for a rich variety of plants and animals. The west fork of the Gallatin River originates in and flows through the planning area. As mentioned above it is part of the Greater Yellowstone Ecosystem. The area runs from river bottoms to mountain peaks and includes pine, fir and spruce forests, and also harbors a number of species of animals including waterfowl, birds of prey, and large mammals such as: deer, elk, moose, black and grizzly bear, wolves, bighorn sheep, mountain goat, lynx, wolverine and so forth. For a more complete list of species and ecological discussion please refer to the Montana Natural Heritage report (reference 4).
- 4. Instead of population, it is more appropriate to discuss connections or single family equivalents because of the transient nature of most of the population. Information for the Meadow Village system indicates that growth is still occurring and is still aggressive in the Big Sky area. There are currently approximately 1,500 single family equivalents (SFEs) in the Meadow Village system.

#### V. ENVIRONMENTAL IMPACTS OF PROPOSED ACTION

A. Direct, indirect and cumulative environmental impacts which are affected by the proposed action:

## 1. Housing/Industrial and Commercial Development:

The proposed action does not affect additional housing, industrial or commercial development. Other development in this area has been and continues to be aggressive and has impacted the environment by developing previously undeveloped lands in an ecologically diverse area. This other development consists primarily of residential and resort type development of ski areas and golf courses and services such as restaurants and other services related to resort customers.

#### 2. Utilities:

The utilities affected by the proposed action include the water system, the wastewater system, the need for additional power, trash hauling and other services required by an expanding population base.

#### 3. Economic and Social Profile:

The non-transient population base of this area is very unique in that it consists primarily of two groups: affluent property owners and lower income resort area workers. The area also has a large transient population base that includes affluent property owners and skiers and other tourists.

#### 4. Land Use:

The land use in this area is almost exclusively recreational. The resort utilizes the mountainous terrain for skiing and summer site seeing and other outdoor recreation. The surrounding area includes a Wilderness Area and other wild lands. The Gallatin River is a mountain freestone stream providing habitat for a variety of fish and invertebrates. The West Fork of the Gallatin and several of its tributaries arise in and flow through the project area.

## 5. Floodplains:

There are floodplains in the planning area but the proposed action will not be constructed in a 100- year floodplain nor should it have any impact on a 100-year floodplain.

#### 6. Wetlands:

The planning area contains wetlands but the proposed action should have no impact on wetlands since the pipeline replacement will be entirely on existing developed land.

## 7. Wild and Scenic Rivers:

The main stem of the Gallatin River has been recommended by the Montana Department of Environmental Quality to receive Outstanding Resource Water designation under Montana Law. In order to receive this designation the Board of Environmental Review would have to adopt a rule classifying this part of the Gallatin as an outstanding resource water and the rule would have to be approved by the legislature (75-5-316 MCA). The project is located away from the main stem of the Gallatin River and should have no impact on it.

#### 8. Cultural (Archeological/Historical):

There are no known archeological or historical sites in the planning area. Montana Historical Society indicated that there are no previously recorded sites in the project area (see reference 5).

## 9. Flora and Fauna (including endangered species):

The project sponsor contacted the Montana Natural Heritage Program (MNHP) and Montana Department of Fish, Wildlife and Parks (FWP) and the United States Fish and Wildlife Service (USFWS) for information regarding flora and fauna and ecological information. The planning area is an island in a diverse wild land. It is surrounded by habitat for many species including several that are considered species of concern by MNHP. Following is a brief list and discussion of those species of concern and the assessed level of impact.

a. Lynx is a listed threatened species that occurs in the area. Direct or indirect impacts to Lynx are not expected from the proposed action. Cumulative impacts, primarily due to

other related projects, may include displacement of individual animals and destruction of habitat due to residential development, commercial development, land development and road building.

- b. Grizzly bear is a listed threatened species that occurs in the project area. Direct and indirect impacts to Grizzlies are not expected from the proposed action. Cumulative impacts, primarily due to other related projects, may include displacement of individual animals and destruction of habitat due to residential development and growth. Also, residential development, commercial development, land development and road building may result in an increased probability of human-bear interactions that often result in bear mortality.
- c. Westslope Cutthroat Trout. This is a sensitive species that occurs outside of the immediate project area. It is at risk in Montana because of very limited or declining numbers, range, and/or habitat destruction, making it vulnerable to global extinction or extirpation in the state. Westslope Cutthroat has been seriously reduced in its range due to hybridization and habitat loss and degradation. Direct and indirect impacts from the proposed action will be non-significant. Cumulative impacts, primarily due to other related projects, including residential development, commercial development, land development and road building may occur. Cumulative impacts may result in habitat degradation or destruction.
- d. Gray Wolf is designated an experimental species in this part of Montana. There is verified wolf activity in the vicinity including the Yellowmule drainages, the Taylor Fork of the Gallatin, and the Porcupine. Management of the wolf has recently passed to the authority of the Montana Department of Fish, Wildlife and Parks. Direct and indirect impacts to Gray Wolves from the proposed action will be non-significant. Cumulative impacts, primarily from other related projects, resulting in residential development, commercial development, land development and road building may occur due to habitat degradation or loss.
- e. Wolverine is designated a sensitive species in this part of Montana. Direct and indirect impacts to wolverine will not occur as a result of the proposed action. Cumulative impacts, primarily due to other related projects, may occur.

## 10. Recreation/Open Space:

Direct and indirect impacts to open space will not be significant as a result of the proposed action. The proposed action may be seen as having a positive impact on recreational opportunities as water quality and public health protection is improved as a result of the project. Silverbow condominiums are surrounded by a golf course, but the project should have little to no impact on the golf course or its use other than traffic disruption.

## 11. Agricultural Lands:

There are no significant agricultural lands in the planning area.

## 12. Air Quality:

There will be minor air quality impacts as a result of the project from construction equipment exhaust and dust generated during construction.

## 11. Water Quality and Quantity:

The proposed action will provide a more reliable supply of drinking water to the Silver Bow area. No adverse effects to groundwater quality are expected as a result of this project. Direct and indirect impacts to groundwater quantity will not occur as a result of this project. Cumulative impacts, primarily due to other related projects, include reduction in groundwater quantity by the withdrawal and consumptive use of water from a growing population base (e.g. two new wells in the Meadow Village part of the Big Sky WSD 363). Groundwater quantity will continue to be impacted cumulatively as a result of this project and other actions occurring in the area. There are currently approximately 120 wells in the project area.

#### 12. Public Health:

Public health will be positively affected by this project. Decreased leakage will result in less water loss and less opportunity for contaminants to enter the system.

## 13. Solid Waste:

The project will generate some solid waste as a direct impact during construction but this will be non-significant. No indirect impacts involving solid waste will occur as a result of the proposed action. Cumulative impacts for solid waste handling and disposal from the proposed action and others in the area may occur.

## 14. Energy:

Energy use during construction will increase slightly. Long term impacts to energy use may be beneficial as newer and larger pipes will have less leakage requiring less pumping of water.

## B. Unavoidable Adverse Impacts

#### 1. Direct and Indirect:

No permanent direct or indirect adverse impacts are anticipated as a result of the proposed action. Temporary adverse impacts may occur including noise and dust from

construction, disruption of normal traffic patterns, stormwater and sediment runoff and interruption of water or sewer service.

## 2. Cumulative:

Cumulative impacts may occur, primarily as a result of other related projects, as the ecological corridor from the Gallatin Valley to the Madison Valley, via the Westfork Gallatin and Jack Creek, will continue to see development as a result of other projects. Possible impacts include those discussed above for the species of concern and similar impacts to other plant and animal species that live in the area.

# VI. MEANS TO MITIGATE ADVERSE ENVIRONMENTAL IMPACTS (DIRECT AND INDIRECT)

Any direct or indirect adverse impacts, such as those discussed above under section V. B., that may occur as a result of this proposed action will be short-term and temporary. Short-term and temporary impacts will be mitigated by various permits required for specific activities, for example stormwater discharge permits, traffic control and temporary water provision requirements and so forth. The applicant is required to identify what permits are required, and to apply for and comply with permit conditions. The DEQ will review and approve the engineering plans and specifications for the proposed action. No mitigation measures have been identified or are planned for potential cumulative impacts.

#### VII. PUBLIC PARTICIPATION

No direct public input has been sought regarding the proposed action. However, a notice of the findings from this environmental assessment will be published. In addition, the public in the Big Sky vicinity is aware of the proposed action through efforts to inform voters of the Water and Sewer district about the proposed action through the development of the Water Facility plan referenced above and through public hearings and regular meetings of the Board of Directors of the Big Sky County Water and Sewer District No. 363.

The following agencies have been provided information regarding this proposed action: the Montana Department of Environmental Quality, the Montana Historical Society (MHS), The Montana Department of Fish, Wildlife and Parks, The United States Fish and Wildlife Service (USFWS), the United States Army Corps of Engineers, the Montana Department of Natural Resources and Conservation, The Montana Natural Heritage Program. Comments have been received from the USFWS and the MHS. To date no other comments have been received.

#### VIII. REFERENCE DOCUMENTS

#### A. References:

- 1. Water Facility Plan Meadow Village Water System
- Water and Sewer District 363, March 2002 by Allied Engineering Service, Inc. and Western Groundwater Services.
- 2. Design Report for 2008 Silverbow Water Line Replacement Project by HKM Engineering, June 2008.
- 3. Plans and Specifications 2008 Silverbow Water Line Replacement Project by HKM Engineering, June 2008.
- 4. Montana Natural Heritage Program, species of concern and ecological report, June 26, 2008
- 5. Letter from Montana Historical Society (MHS) dated June 25, 2008.
- 6. Letter from USFWS dated July 7, 2008.
- 7. Big Sky Water & Sewer District No. 363 Public Hearing and Regular Meeting Minutes May 13, 2008.
- 8. General Manager's Report, Big Sky Water & Sewer District No. 363 May 13 2008.
- 9. Big Sky Water & Sewer District No. 363, Regular Meeting Minutes June 17, 2008.
- 10. Big Sky Water & Sewer District No. 363 Regular Meeting Minutes July 15, 2008.

#### IX. AGENCIES CONSULTED

- A. Montana Department of Fish, Wildlife and Parks.
- B. Army Corps of Engineers.
- C. Montana Department of Natural Resources and Conservation.
- D. State Historic Preservation Officer, Montana Historical Society.
- E. U.S. Fish and Wildlife Service.
- F. Montana Natural Heritage Program.
- G. Montana Department of Environmental Quality

# X. AGENCY ACTION, APPLICABLE REGULATIONS, AND PERMITTING AUTHORITIES

As previously described, the Big Sky Water and Sewer District must have approval from DEQ to construct and operate the water and sewer system improvements outlined in this Environmental Assessment.

In addition, the proposed action will require other permits that must be identified, applied for and complied with by the Big Sky Water and Sewer District. The contractor will submit the necessary documentation, including a notice of intent (NOI) and stormwater pollution prevention plan (SWPPP), to the DEQ storm water permitting program prior to beginning construction.

# XI. RECOMMENDATION FOR FURTHER ENVIRONMENTAL ANALYSIS

☐ EIS ☐ More Detailed EA ☐ X No Further Analysis

A. Rationale for Recommendation: The following discussion is pursuant to ARM 17.4.608 which defines the criteria for determining the significance of impacts.

## 1. Severity, duration, geographic extent, and frequency of occurrence of the impact:

The severity, duration, geographic extent, and frequency of occurrence of direct and indirect impacts as a result of the proposed action are anticipated to be non-significant. The proposed action replaces water lines in existing rights-of-way, in a short period of time, over a limited geographic area and the frequency of occurrence of any impacts will be limited to the period of construction of 30 to 95 days.

## 2. Probability that the impact will occur:

The probability of direct or indirect significant impacts occurring if the proposed action occurs is low.

3. Growth inducing or growth inhibiting aspects, including the relationship or contribution of the impact to cumulative impacts:

The proposed action will neither induce nor inhibit growth, since it involves the replacement of existing water mains serving an existing development. The proposed action will have no contribution to cumulative impacts.

## 4. Quantity/quality of environmental resources/values including uniqueness and fragility:

The richness and diversity of animal and plant life in the area makes it unique. The fragility of each environmental resource or value in the greater Big Sky area is highly variable depending on the resource or value. Open space, wild lands and recreational opportunities are valuable and are what draw people to the area, but the proposed action does not adversely affect these resources or values. None of the species of concern should be directly or indirectly affected by the proposed action.

## 5. Importance to the state and society of each resource or value:

All of the resources and values identified in this environmental assessment are important to the state and society.

## 6. Any precedent that would be set:

No precedent will be set by the proposed action.

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1.	Potential	CONTILCE	with local,	state or	rederai	Taws:

The DWSRF is not aware of any conflicts the proposed action would have with local, state or federal laws.

## 8. Impacts adverse, beneficial or both:

Most of the impacts from the proposed action will be beneficial. There is a low potential for adverse impacts to occur directly or indirectly as a result of the proposed action. This project is one of many in the Big Sky area. The area has undergone and continues to undergo change. When the proposed action is considered cumulatively with other actions in the area, there is an increased potential for adverse impacts. However, the contribution of the proposed action to the sum of cumulative adverse impacts would be minimal and therefore not significant.

EA prepared by:	
Name	Date
EA reviewed by:	
Name	 Date







